

**REMARKS**

Claims 1-5, 7-16 and 18-27 are pending. Claims 1, 2, 13 and 18 are currently amended.

Claims 25-27 are newly added. Applicants respectfully request reexamination and reconsideration of the pending claims.

**Claims Rejected Under 35 U.S.C. § 112**

Claim 2 stands rejected under 35 U.S.C. § 112 for insufficient antecedent basis. Claim 2 is currently amended to remedy this insufficiency. Therefore, Applicants respectfully request withdrawal of the rejection of claim 2 under 35 U.S.C. § 112.

**Claims Rejected Under 35 U.S.C. § 103(a)**

Claims 1-5 and 7-16 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Coscina (U.S. Patent No. 3,878,610) in view of Chartrand (2,426,388). Applicants respectfully traverse this rejection.

As currently amended, independent claim 1 is directed to a dental tray adapted to receive a dental impression material. The tray includes a base having two prongs, a first wall extending from one side of the base, and at least two tearable portions formed on an end of each prong. Both the base and the first wall have one or more openings to allow flowing of the dental impression material therethrough. The tearable portions are removable to adjust a length of one or both of the prongs to fit the dental tray to a particular patient's physiology. Independent claim 13 is directed to a system including upper and lower dental trays, each of which also includes at least two tearable portions on the ends of two prongs to adjust a length of one or more of the prongs to fit the dental tray to a particular patient's physiology.

In contrast to the present invention, Coscina is directed to a dental impression tray 10 provided with score lines 80 on its exterior to convert the tray from a full-arch tray into an anterior impression tray or a half-arch tray. For instance, tray 10 can be sectioned along the two rearward score lines 80 located at each lateral handle 16 to form an anterior tray. Alternatively, tray 10 can be sectioned along the center score line 80 located at anterior handle 14 to form a left or right side half-arch tray. This sectioning of the tray 80 to reconfigure it for a different purpose is quite different than the instant claimed invention which provides a tray with at least two tearable portions on an end of each prong for adjusting a length of one or both of the prongs to fit the dental tray to a particular patient's physiology. For example, according to one aspect of the present invention, tearable portions are left in place at the end of each prong of the dental tray for a patient having a larger dental arch. For a patient having a medium-sized arch, one of the tearable portions at the end of each prong can be removed to provide a better fit with the patient's physiology. For a patient having a smaller sized arch, two or more of the tearable portions at the end of each prong can be removed to provide a better fit.

As indicated above, the score lines taught by Coscina are used for a different purpose and are not useful for adjusting a length of one or both of the prongs to fit the dental tray to a particular patient's physiology. Moreover, Coscina specifically teaches away from the present invention by teaching the use of four different sized trays (shown in Fig. 3 with numerals 18, 20, 10, 22, and described in Col. 3, lines 21-32), each for a particular dentition, rather than teaching or suggesting a tray that can be adjusted with tearable portions at the end of each prong to fit a particular patient's physiology, as taught by the instant invention.

Chartrand does not make up for the deficiencies of Coscina. Chartrand not only fails to teach or suggest tearable portions of any kind, but like Coscina it also teaches away from the

present invention by teaching the use of slidable extensions 20, as shown in Figs. 5-7 and described in Col. 3, line 37 through Col. 4, line 4.

Applicants respectfully submit that even if the combination of Coscina and Chartrand suggested in the Office Action were made, the invention of independent claims 1 and 13 would not be achieved. Applicants thus request withdrawal of the rejection of claims 1 and 13, as well as claims 2- 5, 7-12 and 14-16, which depend variously therefrom, under 35 U.S.C. § 103(a).

Claim 18 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Coscina in view of Chartrand and Halverson et al. (U.S. Patent No. 4,763,791). Claims 19-20 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Coscina in view of Chartrand, Halverson et al. and Kaza (2003/0129565). Claims 21-23 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Coscina in view of Chartrand, Halverson et al. and Bublewitz et al. (U.S. Patent Application Pub. No. 2002/0156186). Claim 24 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Coscina in view of Chartrand, Halverson et al., Bublewitz et al., and Jagmin (U.S. Patent No. 5,044,955).

Presently amended independent claim 18 is directed to a dental impression system that includes a dental tray comprising a radiopaque material adapted to receive a dental impression material thereon and a container to house the dental tray. The dental tray includes a base having two prongs, a wall extending from one side of the base, and at least two tearable portions formed on an end of each prong. Both the base and the wall have one or more openings to allow flowing of the dental impression material therethrough. The tearable portions are removable to adjust a length of one or both of the prongs to fit the dental tray to a particular patient's physiology. Furthermore, the container and the dental tray are adapted to be scanned by a radiographic scanner.

For at least the same reasons articulated above relative to claims 1-5 and 7-16, none of the cited references, either alone or in combination, describe, teach or suggest the dental tray system of pending claim 18. Specifically, none of the references describe a system including upper and lower dental trays, each having at least two tearable portions on each end of two prongs, the tearable portions being removable to adjust a length of one or both of the prongs to fit the dental tray to a particular patient's physiology.

Therefore, Applicants submit that even if the references were combined as suggested in the Office Action, the invention of claim 18 would not be achieved. Furthermore, none of the suggested combinations would achieve any of claims 19-24, which depend variously from independent claim 18. Thus, Applicants respectfully request withdrawal of the rejections of claims 18-24 under 35 U.S.C. § 103(a).

To further distinguish the present invention over the prior art, new claims 25-27 have been added. Support for new claims 25-27 can be found in the original application as filed, at least in Figs. 8 and 9, and on page 10, lines 1-9. None of the cited references, either alone or in combination, describe, teach or suggest a dental tray having at least two tearable portions formed on the end of each of two prongs including at least one distal tearable portion that should first be removed to allow access to at least one proximal tearable portion for removal.

### **CONCLUSION**

In view of the foregoing, Applicants believe that the specification, drawings and all claims now pending in this Application are in condition for allowance. Therefore, Applicants respectfully request a formal Notice of Allowance at an early date.



PATENT

Attorney Docket No.: AT-000218

If for any reason the Examiner believes that a telephone conference would expedite prosecution of the subject application, the Examiner is invited to telephone the undersigned at 408-789-1522.

Please charge any required fees to Deposit Account No.: 50-1399.

Respectfully submitted,

Signed by Douglas C. Limbach,  
Reg. No. 35,249  
Greenberg Traurig, LLP

for Scott M. Smith, MD, JD,  
Reg. No. 48,268  
Align Technology, Inc.

Dated: November 10, 2005

ALIGN TECHNOLOGY, INC.  
881 Martin Avenue  
Santa Clara, CA 95050  
Tel: (408) 470-1243  
Fax: (408) 470-1024

GREENBERG TRAURIG, LLP  
1900 University Avenue, Fifth Floor  
East Palo Alto, CA 94303  
Phone: (650) 289-7876  
Fax: (650) 328-8508  
E-Mail: limbachd@gtlaw.com